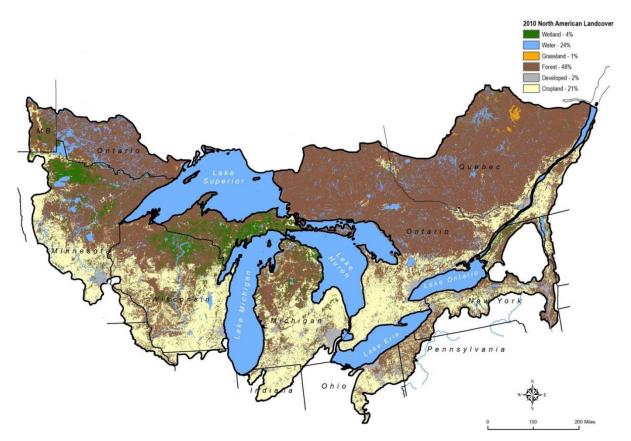
## SELECTING SURROGATE SPECIES FOR THE UPPER MIDWEST AND GREAT LAKES GEOGRAPHY

## **EXECUTIVE SUMMARY**

The Technical Team developed a list of 36 surrogate species across seven broad habitat types within the Upper Midwest and Great Lakes (UMGL) geography using an eight step selection process grounded in the elements of Strategic Habitat Conservation. Engaging U.S. Fish and Wildlife Service staff, along with state and tribal partners at key decision points throughout the process, the final list of 36 surrogate species emerged from an initial comprehensive list of 3,256 species identified as management priority within the UMGL geography. The initial list was first reduced to 500 potential surrogate species by focusing on those identified as Federal trust. The list was further refined to approximately 100 species based on their occurrence within the UMGL geography during at least a portion of their life history, sensitivity to management and conservation actions, ability to be accurately and precisely measured, and the existence of sufficient information to spatially plan and design conservation. The seven broad habitat systems, including Forest, Shrubland, Grassland, Beach and Open Coast, Riverine and Riparian, Lacustrine, and Palustrine were chosen to represent the major fish and wildlife habitats occurring in the UMGL geography. For each habitat system, the factors that potentially limit species populations on the landscape were assessed and prioritized for each species. Using a management umbrella/management indicator surrogate species approach, the 100 species were evaluated and ranked within each habitat system. Ultimately a suite of species for each habitat system was selected to represent the sub-habitats within each system, as well as other species or natural communities with similar threats and limiting factors in the UMGL geography.



The Upper Midwest and Great Lakes Landscape Conservation Cooperative Geography

## Surrogate Species for the Upper Midwest Great Lakes Geography

<b>Broad Habitat System</b>	Common Name	Scientific Name
Forest	Canada Warbler	Cardellina canadensis
	Pine Warbler	Dendroica pinus
	Wood Thrush	Hylocichla mustelina
Shrubland	American Woodcock	Scolopax minor
	Brown Thrasher	Toxostoma rufum
	Golden-winged Warbler	Vermivora chrysoptera
Grassland	Bobolink	Dolichonyx orizivorus
	Eastern Meadowlark	Sturnella magna
	Eastern Prairie Fringed Orchid	Platanthera leucophaea
	Henslow's Sparrow	Ammodramus henslowii
	Karner Blue Butterfly	Lycaeides melissa samuelis
	Northern Flicker	Colaptes auratus
	Upland Sandpiper	Bartramia longicauda
	Monarch Butterfly*	Danaus plexippus
Beach and Open Coast	Houghton's Goldenrod	Solidago houghtonii
	Piping Plover	Charadrius melodus
Riverine & Riparian	Brook Trout	Salvelinus fontinalis
	Higgin's Eye Pearlymussel	Lampsilis higginsi
	Lake Sturgeon	Acipenser fulvescens
	Paddlefish	Polyodon spathula
	Red-shouldered Hawk	Buteo lineatus
	River Redhorse	Moxostoma carinatum
	Smallmouth Bass	Micropterus dolomieu
	Snuffbox	Epioblasma triquetra
	Walleye	Sander vitreus
	Wood Duck	Aix sponsa
Lacustrine	Common Loon	Gavia immer
	Common Tern	Sterna hirundo
	Lesser Scaup	Aythya affinis
	Bloater	Coregonus hoyi
	Cisco	Coregonus artedi
	Lake Trout	Salvelinus namaycush
Palustrine	Black Tern	Chlidonias niger
	Blue-winged Teal	Anas discors
	Mallard	Anas platyrhynchos
	Le Conte's Sparrow	Ammodramus leconteii

<sup>\*</sup>Monarch butterfly is a national priority species and was included as a flagship surrogate species. A systematic process to represent the habitat needs of multiple pollinator species and species with similar limiting factors was not conducted during this surrogate species selection process.